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**IN THE UNITED STATES DISTRICT COURT**  
**FOR THE DISTRICT OF OREGON**  
**EUGENE DIVISION**

WILLAMETTE RIVERKEEPER, *et al.*,

*Plaintiffs,*

v.

NATIONAL MARINE FISHERIES SERVICE, *et al.*,

*Defendants,*

and

OREGON DEPARTMENT OF FISH AND WILDLIFE,

*Defendant-Intervenor.*

Case No. 6:21-cv-34-AA

**FEDERAL DEFENDANTS'  
CROSS-MOTION FOR  
SUMMARY JUDGMENT AND  
OPPOSITION TO  
PLAINTIFFS' MOTION FOR  
SUMMARY JUDGMENT**

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## MOTION

Federal Defendants move for summary judgment on all claims in Plaintiffs' Second Amended Complaint, ECF 46. Through counsel, the parties have made a good faith effort to resolve this dispute but have been unable to do so. L.R. 7-1(a)(1)(A).

## INTRODUCTION

In this case, Plaintiffs attempt to shut down a summer-run steelhead hatchery program in the Upper Willamette River basin despite (1) ongoing, successful efforts to reduce interactions between hatchery summer steelhead and winter-run steelhead listed as threatened under the Endangered Species Act ("ESA") and (2) the National Marine Fisheries Service's ("NMFS") recent conclusion that the program is not likely to jeopardize the continued existence of threatened winter steelhead.

To make up for sport fishing opportunities lost because of the construction and operation of Willamette Valley Project dams, the U.S. Army Corps of Engineers ("Corps") funds part of a hatchery program operated by the Oregon Department of Fish and Wildlife ("ODFW") to raise and release summer steelhead into streams in the Upper Willamette River basin. This hatchery program has released summer steelhead into the Upper Willamette River basin, including the North Santiam and South Santiam Rivers, since the 1960s. After NMFS listed winter steelhead in the Upper Willamette River as threatened in 1999, the Corps consulted with NMFS under ESA Section 7(a)(2) to ensure that the Corps' funding of the hatchery program is not likely to "jeopardize" the continued existence of threatened winter steelhead. NMFS completed consultations on the program in 2000, 2008, and 2019.

In the 2019 biological opinion evaluating the impacts of the summer steelhead hatchery program on winter steelhead going forward ("BiOp"), NMFS for the first time considered a suite of mitigation measures in ODFW's 2018 Hatchery and Genetics Management Plan for the Upper Willamette Summer Steelhead Program ("HGMP"), implemented between the 2008 consultation and the 2019 consultation. These mitigation measures are designed to reduce interactions between summer steelhead and winter steelhead and include:



- (1) constructing more efficient fish traps to maximize the number of summer steelhead collected and removed from the North Santiam and South Santiam Rivers;
- (2) acclimating summer steelhead to the locations of the traps before releasing them from those locations to maximize their ability to return to the traps for collection and removal;
- (3) reducing the numbers of summer steelhead released in the North Santiam and South Santiam Rivers, and releasing only summer steelhead that leave the hatchery on their own, to decrease the chance that summer steelhead will residualize (remain in the rivers without migrating out to the ocean);
- (4) ending the placement of summer steelhead collected in traps back into the rivers to give anglers another opportunity to catch them (recycling); and
- (5) selecting summer steelhead for hatchery breeding (broodstock) that are among the earliest to return to the river, so that summer steelhead released going forward are even less likely to spawn during the time that winter steelhead spawn.

In the BiOp, NMFS concluded that the ongoing operation of the summer steelhead hatchery program is not likely to “jeopardize” the continued existence of threatened winter steelhead. NMFS also concluded that the summer steelhead hatchery program is expected to incidentally “take” threatened winter steelhead because of genetic and ecological interactions between hatchery and wild steelhead. The BiOp thus includes an incidental take statement (“ITS”), which exempts the Corps from liability under ESA Section 9 for incidental take of winter steelhead. NMFS’s conclusions are based on the correct legal standards for assessing agency actions under ESA Section 7, are fully explained and supported by evidence in the administrative record, and represent expert agency judgments that should be upheld under the very deferential standard of review applicable to NMFS’s scientific determinations. NMFS also appropriately conducted an environmental analysis and prepared an Environmental Impact Statement (“EIS”) of the HGMP evaluating, among other things, the impacts on winter steelhead under a range of alternatives, in compliance with the National Environmental Policy Act (“NEPA”).

Plaintiffs’ brief in support of their motion for summary judgment, ECF 49 (“Pls.’ Br.”), fails in its attempts to challenge the BiOp and the EIS. Plaintiffs’ arguments mischaracterize the BiOp, disregard the many mitigation efforts described above, and misinterpret findings from certain studies. Moreover, Plaintiffs’ argument that NMFS violated NEPA by failing to consider a reasonable range of alternatives is conclusory and incorrect. For these reasons and others described below, the Court should grant Federal Defendants’ cross-motion for summary judgment and deny Plaintiffs’ motion for summary judgment.

## **LEGAL BACKGROUND**

### **I. Endangered Species Act**

The ESA provides for the listing of species as threatened or endangered, 16 U.S.C. § 1533, and protects listed species in several ways. Section 7(a)(2) of the ESA requires federal agencies to ensure that “any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species” or to destroy or adversely modify its critical habitat. *Id.* § 1536(a)(2). The ESA requires an agency proposing an action (the “action agency”) to consult with the U.S. Fish and Wildlife Service (“FWS”) or NMFS (the “consulting agency”) whenever the agency’s action “may affect” a listed species. *Id.*; 50 C.F.R. § 402.14(a). If the proposed action is “likely to adversely affect” listed species or critical habitat, the agencies must engage in formal consultation. 50 C.F.R. § 402.14. Formal consultation culminates in the issuance of a “biological opinion” by the consulting agency. *Id.* § 402.14(h).

A biological opinion provides the consulting agency’s expert opinion on whether the proposed action is likely to “jeopardize the continued existence of” any listed species or result in the destruction or adverse modification of its designated critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14. Under the ESA and its regulations, not all harm to listed species rises to the level of causing “jeopardy.” Rather, to “jeopardize the continued existence of” means to “engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the

reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02. If the consulting agency determines the proposed action is likely to jeopardize the listed species, then it must formulate a reasonable and prudent alternative. 16 U.S.C. § 1536(b)(3)(A).

If the consulting agency reaches a no-jeopardy decision and finds that the destruction or adverse modification of critical habitat is not likely, but also finds that incidental “take”<sup>1</sup> of the species is reasonably certain to occur, the agency will issue an ITS. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(g)(7). An ITS specifies the amount or extent of anticipated take, reasonable and prudent measures to minimize the impact of the take, and mandatory terms and conditions to implement the reasonable and prudent measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1)(ii), (i)(1)(iv). Any take in compliance with the ITS is exempt from liability under ESA Section 9, which prohibits any person, including a federal agency, from “taking” individual members of a listed species. 16 U.S.C. § 1536(o)(2); *id.* § 1538(a)(1)(B). There are a number of circumstances that may require reinitiation of ESA Section 7(a)(2) consultation, including if the amount or extent of take specified in the ITS is exceeded. 50 C.F.R. § 402.16.

## **II. National Environmental Policy Act**

NEPA, 42 U.S.C. §§ 4321–4360m-11, requires federal agencies to examine the environmental effects of proposed federal actions. *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 97 (1983). Unlike other environmental statutes, NEPA does not mandate any substantive results, but only prescribes a necessary process for analyzing potential environmental effects. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350–51 (1989). NEPA’s “mandate to the agencies is essentially procedural” and is designed “to insure a fully informed and well-considered decision.” *Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def.*

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<sup>1</sup> Under the ESA, “take” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19). “Take” for purposes of the ESA thus is not defined solely in terms of death or physical injury and includes harassment or other lesser impacts that may impact a listed species’ behavior. As authorized by ESA Section 4(d), *id.* § 1533(d), NMFS has issued regulations extending the take prohibition to threatened species, with certain exceptions. 50 C.F.R. § 17.31.

*Council*, 435 U.S. 519, 558 (1978). In reviewing the sufficiency of an agency’s NEPA analysis, the role of the courts is simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious. *Balt. Gas & Elec. Co.*, 462 U.S. at 97–98.

NEPA and its implementing regulations require the preparation of an EIS for “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). One of NEPA’s requirements is that an EIS must “briefly specify the underlying purpose and need” for a project and propose and evaluate “reasonable alternatives” to the proposed action. 40 C.F.R. §§ 1502.13–14. An EIS’s range of alternatives is reviewed under a “rule of reason.” *Westlands Water Dist. v. U.S. Dep’t of Interior*, 376 F.3d 853, 868 (9th Cir. 2004).

## **FACTUAL BACKGROUND**

### **I. The Willamette Valley Project**

The Willamette River Basin Flood Control Project (“Willamette Valley Project”) is a network of 13 Federal dams and related facilities on various tributaries in the Willamette River basin. NOAA AR 2007, 2271. The Corps constructed the Willamette Valley Project dams pursuant to authorization and appropriations in the Flood Control Acts of 1938 and 1950. USACE AR 6585. Because these dams block fish passage and therefore access to historic habitat above the dams, Congress also authorized the Corps to build, operate, and fund hatchery facilities and programs to compensate for resulting impacts to fish and fisheries. NOAA AR 2275. These Willamette Valley Project dams include the Big Cliff and Detroit Dams on the North Santiam River and the Foster and Green Peter Dams on the South Santiam River. NOAA AR 2007, 2271.

### **II. Threatened Upper Willamette River Winter Steelhead**

In 1999, NMFS issued a final rule listing the evolutionarily significant unit (“ESU”) of winter-run steelhead in the Upper Willamette River as threatened. 64 Fed. Reg. 14517, 14521 (Mar. 25, 1999). In 2006, NMFS relisted the Upper Willamette River winter steelhead distinct

population segment (“DPS”) as threatened.<sup>2</sup> 71 Fed. Reg. at 860; NOAA AR 2030. Hatchery summer steelhead in the Upper Willamette River “are an out-of-basin stock and not considered part of the DPS.” NOAA AR 2030. The DPS consists of four populations: North Santiam, South Santiam, Molalla, and Calapooia. NOAA AR 2030; USACE AR 6601. The primary threats to the North Santiam and South Santiam populations—the only two populations of the DPS into which hatchery summer steelhead are released—are habitat loss and degradation caused by the Willamette Valley Project dams, which block winter steelhead from about one-third of their historic habitat. NOAA AR 2037, 2809.

NMFS reviewed the status of the DPS in 2016 and concluded that winter steelhead should remain listed as threatened. NOAA AR 2031. From 2007 to 2016, an annual average of 3,140 adult winter steelhead were counted at Willamette Falls. *Id.*

### **III. ODFW’s Summer Steelhead Hatchery Program**

To compensate for sport fishing opportunities lost because of the construction and operation of Willamette Valley Project dams, ODFW operates a hatchery program to raise and release summer-run steelhead into streams in the Upper Willamette River basin. USACE AR 6585, 6596. ODFW began releasing summer steelhead into the North Santiam River in 1966 and into the South Santiam River in 1969. USACE AR 6595. The Corps stopped funding the production and release of hatchery summer steelhead in the South Santiam River in 2017 and in the North Santiam River in 2018. *Willamette Riverkeeper v. U.S. Army Corps of Eng’rs*, No. 6:17-cv-000801-MC, Stipulated Voluntary Dismissal, ECF 46 at 2–3; *see also* USACE AR 6583

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<sup>2</sup> The ESA defines “species” to include subspecies and any “[DPS] of any species of vertebrate fish . . . which interbreeds when mature.” 16 U.S.C. § 1532(16). In 1991, NMFS issued a policy stating that a Pacific salmonid population would be considered a [DPS] if it represented an [ESU] of the species—that is, if the population is “substantially reproductively isolated from other conspecific population units” and “represent[s] an important component in the evolutionary legacy of the species.” 56 Fed. Reg. 58612, 58618 (Nov. 20, 1991). NMFS and FWS subsequently adopted a joint policy for recognizing DPSs. 61 Fed. Reg. 4722 (Feb. 7, 1996). Because NMFS and FWS share jurisdiction over West Coast steelhead, and because West Coast steelhead is “a type of salmonid with characteristic not typically exhibited by Pacific salmon,” NMFS relisted the Upper Willamette River winter steelhead ESU as a DPS. 71 Fed. Reg. 834 (Jan. 5, 2006).

(“The [Corps] does *not* fund summer steelhead production in the North or South Santiam Basin.” (emphasis added)).

ODFW spawns and rears summer steelhead at the South Santiam Hatchery at the base of Foster Dam, where the Foster Fish Collection Facility is located, for release into the South Santiam River. NOAA AR 2337. ODFW releases summer steelhead into the North Santiam River from the Minto Fish Collection Facility. NOAA AR 2327. ODFW also releases summer steelhead into the mainstem Willamette, Middle Fork Willamette, and McKenzie Rivers. USACE AR 6592, 6595. They are released as smolts that are ready to emigrate to the ocean. NOAA AR 2100; USACE AR 6596. The vast majority of smolts emigrate to the ocean within seven to ten days of release. NOAA AR 2177. From 2003 to 2014, an average of 595,600 hatchery summer steelhead smolts per year were released in the Upper Willamette River. USACE AR 6592–93. After smolts emigrate to the ocean, they typically return to the Upper Willamette River two years later as adults to spawn. From 2005 to 2016, an average of 18,500 adult hatchery summer steelhead returned per year. *Id.* Anglers caught roughly 10,000 of these summer steelhead per year on average from 2007 to 2015. USACE AR 6593.

#### **IV. The 2008 Biological Opinion, 2018 Hatchery Genetic Management Plan, and 2019 Biological Opinion**

In 2008, NMFS completed consultation on the effects of the Willamette Valley Project, including the summer steelhead hatchery program, on winter steelhead and spring Chinook salmon. NOAA AR 2238–3508. In the 2008 biological opinion, NMFS concluded that the Willamette Valley Project jeopardizes the continued existence of Upper Willamette River winter steelhead. NOAA AR 3178–79. NMFS proposed that the Corps submit to NMFS and implement an HGMP for the summer steelhead hatchery program to reduce and minimize adverse effects to winter steelhead as a reasonable and prudent alternative. NOAA AR 3250–51. The 2008 biological opinion also recommended a variety of mitigation measures to reduce interactions between hatchery summer steelhead and winter steelhead: releasing only hatchery summer steelhead that leave the hatchery of their own volition to reduce residualism; reducing summer

steelhead recycling in the North Santiam and South Santiam Rivers; reducing hatchery summer steelhead releases in the North Santiam River; reconstructing the Foster and Minto adult fish collection facilities; and adopting an adaptive management approach to the hatchery that incorporates research, monitoring, and evaluation. NOAA AR 3253–55, 3292–95.

In 2018, the Corps and ODFW submitted to NMFS an HGMP for the summer steelhead hatchery program. USACE AR 6579–674.<sup>3</sup> The HGMP incorporated the mitigation measures implemented in accordance with in the 2008 biological opinion along with additional measures to reduce interactions between hatchery summer steelhead and winter steelhead, such as acclimating hatchery summer steelhead to the locations of the traps before release, reducing hatchery summer steelhead releases in the South Santiam River, ending summer steelhead recycling, and advancing spawn timing of hatchery summer steelhead to reduce the likelihood of interbreeding. USACE AR 6591–92, 6594, 6596–98. The HGMP proposes releasing 547,500 hatchery summer steelhead smolts into the Upper Willamette River, including 121,000 into the North Santiam River and 121,000 into the South Santiam River. USACE AR 6592.

In 2019, NMFS completed consultation on the effects of the summer steelhead hatchery program as described in the HGMP.<sup>4</sup> NOAA AR 1990–2237. In the 2019 BiOp, NMFS concluded that the summer steelhead hatchery program, as improved through the mitigation measures outlined in the HGMP, would not jeopardize the continued existence of listed winter steelhead. NOAA AR 2197. Because NMFS also concluded that the summer steelhead hatchery program causes incidental “take” of threatened winter steelhead because of genetic and ecological interactions between hatchery and wild steelhead, the BiOp includes an ITS exempting incidental take of winter steelhead from liability under ESA Section 9, along with

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<sup>3</sup> Plaintiffs’ brief cites the HGMP in the record at NOAA AR 4331–426 (dated March 15, 2018), but the up-to-date version of the HGMP is at USACE AR 6579–674 (dated June 12, 2018). *See also* USACE AR 6675–772 (email from Corps transmitting updated HGMP to NMFS).

<sup>4</sup> The BiOp also evaluated the effects of five other Corps-funded ODFW hatchery programs in the Upper Willamette River with HGMPs: four spring Chinook salmon hatchery programs and a rainbow trout hatchery program. *See* NOAA AR 2005–06. These hatchery programs and their HGMPs are not at issue in this case.



terms and conditions with which the Corps and ODFW must comply. NOAA AR 2197–205, 2207. NMFS also prepared an EIS under NEPA evaluating the environmental impacts of the HGMPs, NOAA AR 14316–733, and issued a Record of Decision documenting its authorization of the summer steelhead hatchery program HGMP,<sup>5</sup> NOAA AR 14080–87.

### STANDARD OF REVIEW

A plaintiff must satisfy a “high threshold” to establish that agency action is unlawful under the Administrative Procedure Act (“APA”): “An agency’s decision may be set aside only if it is ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’” *River Runners for Wilderness v. Martin*, 593 F.3d 1064, 1067–70 (9th Cir. 2010) (quoting 5 U.S.C. § 706(2)(A)). This standard is “highly deferential, presuming the agency action to be valid and affirming the agency action if a reasonable basis exists for its decision.” *Ranchers Cattlemen Action Legal Fund United Stockgrowers of Am. v. Dep’t of Agric.*, 499 F.3d 1108, 1115 (9th Cir. 2007) (citation omitted). Courts are at their most deferential “where, as here, the challenged decision implicates substantial agency expertise.” *Mt. Graham Red Squirrel v. Espy*, 986 F.2d 1568, 1571 (9th Cir. 1993). The APA “does not allow the court to overturn an agency decision because it disagrees with the decision.” *River Runners*, 593 F.3d at 1070. An agency decision is arbitrary and capricious only if “the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

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<sup>5</sup> The Record of Decision also authorized the rainbow trout HGMP and approved the Chinook salmon HGMPs. NOAA AR 14080–87. Because the summer steelhead hatchery program does not involve direct take of listed winter steelhead for broodstock purposes, NMFS did not additionally evaluate the summer steelhead hatchery program HGMP under limit 5 of NMFS’s 4(d) Rule. NOAA AR 2004. In contrast, because the spring Chinook salmon hatchery programs “propose to take natural-origin fish for broodstock purposes”—*i.e.*, they include direct take of listed spring Chinook salmon—NMFS also separately evaluated and approved the spring Chinook salmon hatchery programs under limit 5 of the 4(d) Rule. NOAA AR 2003, 14084–85.



## ARGUMENT

Plaintiffs' claims have no basis in the law or facts for multiple reasons. First, Plaintiffs lack standing because neither the Corps nor FWS funds hatchery summer steelhead releases into the North Santiam or South Santiam Rivers. Second, Plaintiffs have waived their ESA citizen-suit claim against the Corps and FWS for allegedly violating ESA Section 7 by failing to make any argument in their motion for summary judgment. Third, Plaintiffs expressly removed their APA claim in the Second Amended Complaint, leaving only an ESA citizen-suit claim, and thus can no longer challenge the BiOp or its conclusions. Fourth, even if Plaintiffs can challenge the BiOp without an APA claim, the BiOp reasonably concluded that the summer steelhead hatchery program is not likely to jeopardize listed winter steelhead. Fifth, Plaintiffs' arguments to the contrary misrepresent the proposed action and lack support in the record and case law. Sixth, the EIS complied with NEPA. Seventh, and finally, Plaintiffs' requested remedy is not warranted.

### **I. Plaintiffs lack standing.**

The Court lacks jurisdiction over Plaintiffs' ESA claims because neither the Corps nor FWS funds the production or release of live hatchery summer steelhead into the North Santiam or South Santiam Rivers inhabited by Upper Willamette River winter steelhead. And it follows that if the Corps and FWS do not fund these activities, they do not form the basis of the action subject to consultation with NMFS. Thus, Plaintiffs also lack standing for any ESA claim against NMFS.

To establish Article III standing, a plaintiff must demonstrate that it (1) suffered an injury-in-fact that (2) is fairly traceable to the defendant's conduct and which (3) is likely to be redressed by a favorable decision. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992). Here, Plaintiffs' asserted injuries are not fairly traceable to any funding action taken by the Corps or FWS. Some of Plaintiffs' declarants profess injuries from the hatchery summer steelhead program to their interests in winter steelhead recovery and fishing in the Santiam River basin. *See* Declaration of Bill Martin Bakke, ECF 51 ¶¶ 8–9, 12; Declaration of Christina Eastman, ECF 53 ¶ 4. But the Corps has not funded releases of summer steelhead into the North Santiam

or South Santiam Rivers since 2018 and 2017, respectively. *Willamette Riverkeeper*, No. 6:17-cv-000801-MC, Stipulated Voluntary Dismissal, ECF 46 at 2–3; *see also* USACE AR 6583 (“The [Corps] does *not* fund summer steelhead production in the North or South Santiam Basin.” (emphasis added)). Similarly, although ODFW receives two annual Sport Fish Restoration Act (“SFR”)<sup>6</sup> grants from FWS for activities related to the HGMP, FWS does not fund the production or release of live hatchery summer steelhead in the Upper Willamette River. The first SFR grant, the Salmon and Trout Enhancement Program (“STEP”) Grant, uses SFR funds to support STEP biologists across ten districts in Oregon. FWS AR 295. The STEP grant narrative specifies that SFR grants fund twelve fish dissections in classrooms, using summer steelhead “juveniles that did not leave [the South Santiam hatchery] under volitional release or surplus adults leftover from production,” FWS AR 322, and fish carcass placement in the Upper Willamette River basin, also called “nutrient enhancement,” FWS AR 324. The second SFR grant, the Operation and Maintenance of Hatchery Facilities SFR (“Hatchery SFR”) Grant for 2020–2021, partially operates six hatcheries for salmon, steelhead, and trout. FWS AR 85. But the Hatchery SFR allows hatchery-raised summer steelhead produced with SFR funds to be released—live—only in the Siletz River, FWS AR 89, which is not part of the Upper Willamette River basin and which the Upper Willamette River winter steelhead DPS does not inhabit.

Because neither the Corps nor FWS has exercised discretion to fund the summer steelhead releases into the North Santiam and South Santiam Rivers that Plaintiffs challenge, Plaintiffs cannot establish that either the Corps or FWS (or through them, NMFS) has caused their asserted injuries and therefore lack standing to pursue their ESA claim.

## **II. Neither the Corps nor FWS unreasonably relied on the BiOp.**

Although Plaintiffs’ Second Amended Complaint raises an ESA citizen-suit claim against the Corps and FWS alleging that the action agencies failed to avoid jeopardizing winter steelhead

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<sup>6</sup> The SFR establishes a program of federal grants to states and territories for projects relating to the “restoration and management of all species of fish which have material value in connection with sport or recreation.” 16 U.S.C. § 777a(1).

as required under Section 7(a)(2), *see* ECF 46 ¶¶ 44–45, Plaintiffs’ brief fails to put forward any argument in support of this claim. Even if Plaintiffs have standing to pursue their ESA citizen-suit claim against the Corps or FWS, Plaintiffs cannot establish that the Corps or FWS violated its obligation under ESA Section 7(a)(2) simply by challenging the BiOp’s conclusions.

When courts “review[] the decision of an action agency to rely on a BiOp, the focus of [their] review is quite different than when [they] are reviewing a BiOp directly. In the former case, the critical question is whether the action agency’s *reliance* was arbitrary and capricious, not whether the BiOp itself is somehow flawed.” *City of Tacoma, Wash. v. Fed. Energy Regul. Comm’n*, 460 F.3d 53, 75 (D.C. Cir. 2006) (citations omitted) (emphasis added). The Ninth Circuit has found that an action agency’s reliance on a BiOp is not arbitrary and capricious and “will satisfy its obligations under the [ESA] if a challenging party can point to no ‘new’ information . . . which challenges the [BiOp’s] conclusions” and would thus give the action agency a reason not to rely on the BiOp. *Pyramid Lake Paiute Tribe of Indians v. U.S. Dep’t of the Navy*, 898 F.2d 1410, 1415 (9th Cir. 1990) (citation omitted).

Here, Plaintiffs appear to attack NMFS’s conclusions in the BiOp but do not make any argument that the Corps and FWS unreasonably relied on the BiOp, let alone provide any post-BiOp information that would undermine the Corps’ and FWS’s reliance. Nor do Plaintiffs argue that the Corps or FWS ignored the BiOp or failed to comply with its terms and conditions. Indeed, Plaintiffs make no argument at all in support of their claim that the Corps and FWS violated their substantive obligation under ESA Section 7 to avoid jeopardy to listed species. *See Graves v. Arpaio*, 623 F.3d 1043, 1048 (9th Cir. 2010) (finding argument not raised in opening brief waived); *Zamani v. Carnes*, 491 F.3d 990, 997 (9th Cir. 2007) (“The district court need not consider arguments raised for the first time in a reply brief.” (citation omitted)). Because Plaintiffs have waived any argument that the Corps or FWS violated ESA Section 7, their ESA citizen-suit claim against the Corps and FWS fails.

### **III. Plaintiffs fail to allege a cognizable challenge to the BiOp.**

In addition, because of Plaintiffs’ decision to file a Second Amended Complaint that dropped their APA claim, they no longer have a cognizable basis to challenge NMFS’s BiOp and thus the Court must presume the BiOp is valid and reject Plaintiffs’ attempts to attack the BiOp and its conclusions. Indeed, the Supreme Court has made clear that jurisdiction for ESA Section 7 claims against consulting agencies’ (here, NMFS) biological opinions arise under the APA, not under the ESA citizen-suit provision (which applies to ESA Section 7 claims against action agencies such as the Corps and FWS). *Bennett v. Spear*, 520 U.S. 154, 176, 178 (1997) (parsing 16 U.S.C. § 1540(g)(1)(A)).

In this case, while Plaintiffs’ First Amended Complaint alleged an ESA Section 7 citizen-suit claim against the action agencies and an APA claim against NMFS, *see* ECF 20 ¶¶ 44–45 (ESA citizen-suit claim against Corps and FWS), 46–50 (APA claim against NMFS),<sup>7</sup> Plaintiffs expressly deleted their APA claim in the Second Amended Complaint, *see* ECF 46 ¶¶ 44–48 (removing APA claim against NMFS but retaining ESA citizen-suit claim). Their only remaining ESA Section 7 claim is an ESA citizen-suit claim, which can only be raised against the Corps and FWS, not NMFS. Thus, Plaintiffs cannot challenge whether NMFS complied with ESA Section 7 in issuing the BiOp.

Because Plaintiffs allege no cognizable claim challenging to the BiOp, the Court must presume that the BiOp is valid. Plaintiffs cannot evade that conclusion or shoehorn in a challenge to the BiOp through their ESA citizen-suit claim against the Corps and FWS.

### **IV. NMFS reasonably found that releases of hatchery summer steelhead would not jeopardize the continued existence of Upper Willamette River winter steelhead.**

Even if Plaintiffs could challenge the BiOp based on their current complaint, the BiOp is rational and supported by the record. After reviewing the status of winter steelhead and the potential effects of hatchery summer steelhead on winter steelhead, NMFS reasonably found that

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<sup>7</sup> *See also* Federal Defendants’ Response to Plaintiffs’ First Set of Discovery Requests at 2 n.1, ECF 50 at 7 n.1 (“Plaintiffs brought *solely* APA and NEPA claims (not ESA-citizen suit[]) claims against . . . [NMFS] . . .” (emphasis added)).

the continued operation of the summer steelhead hatchery program is not likely to appreciably reduce the winter steelhead's likelihood of survival and recovery.

**A. The BiOp thoroughly evaluates the effects of the action on winter steelhead against the environmental baseline.**

The “environmental baseline” is the condition of the listed species or its critical habitat “without the consequences . . . caused by the proposed action.” 50 C.F.R. § 402.02. It includes “the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early [S]ection 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.” *Id.*

Under ESA Section 7(a)(2), the BiOp must evaluate “how the [proposed] *agency action* affects the species or its critical habitat,” 16 U.S.C. § 1536(b)(3)(A) (emphasis added), and the consulting agency must make a jeopardy finding only if a species’ likelihood of survival and recovery in the wild are “‘appreciably’ diminished *by the [action]*.” *Salmon Spawning & Recovery All. v. NMFS*, 342 F. App’x 336, 338 (9th Cir. 2009) (emphasis added) (citation omitted). While NMFS must analyze the effects of the proposed agency action against the existing baseline condition of winter steelhead in the Upper Willamette River, *see* 50 C.F.R. § 402.14(g)(2), (g)(4), the relevant inquiry under ESA Section 7(a)(2) is not whether the species and its habitat continue to suffer adverse effects from other actions, such as dams, development, or climate change, but rather whether, against that backdrop, the proposed agency action under review—here, the operation of the summer steelhead hatchery program—would “place the existence of the species in jeopardy.” *Selkirk Conservation All. v. Forsgren*, 336 F.3d 944, 957 (9th Cir. 2003).

To begin, Plaintiffs’ arguments concerning the environmental baseline—like several of their arguments, including those on interbreeding, predation, and competition—misleadingly focus on just the areas in the North Santiam and South Santiam Rivers below the dams, where winter steelhead spawning habitat overlaps with releases of summer steelhead, rather than on the

entire geographic area within the Willamette River basin where winter steelhead live or spawn. The BiOp illustrates that the overlap between the Upper Willamette River winter steelhead DPS's spawning habitat and areas where summer steelhead are released is in fact limited, and that most of the DPS's spawning habitat—including in much of the North Santiam and South Santiam Rivers—does not overlap with areas where summer steelhead are released. For example, Figure 1 below shows winter steelhead critical habitat in blue and the areas where hatchery summer steelhead are released into the North Santiam and South Santiam Rivers below the dams, and thus where hatchery summer steelhead interact with winter steelhead, in yellow.



**Figure 1** (NOAA AR 2174, Figure 66)

In analyzing the environmental baseline, NMFS acknowledged that “[c]onstruction of the 13 Federal dams . . . has had the most profound effect on . . . steelhead and their habitats” because “[t]he vast majority of historic . . . steelhead habitat was blocked and lost from production in the major population areas,” including the North Santiam and South Santiam Rivers. NOAA AR 2050. The BiOp discussed the effects of this habitat loss, including “the loss of important genetic resources” and “substantial” reductions in “the amount and complexity of juvenile rearing habitat” below the dams. *Id.* The environmental baseline in the BiOp includes mitigation measures analyzed as reasonable and prudent alternatives in the 2008 biological opinion, and which “had been implemented or [we]re well into the planning and construction process,” including “the rebuilding of the fish collection facilities at Minto [and] Foster . . .



dams[.]” NOAA AR 2053; *see also* *Nw. Env’t Def. Ctr. v. NMFS*, 647 F. Supp. 2d 1221, 1238 (D. Or. 2009) (upholding biological opinion that included “existing docks and structures” in the environmental baseline).

Contrary to Plaintiffs’ assertions, *see* Pls.’ Br. at 12–15, the BiOp addresses how dam operations impair habitat below the dams by raising water temperature and altering water flow and how those habitat conditions impact incubating winter steelhead eggs, NOAA AR 2054–55, rearing, NOAA AR 2059–60, smolt emigration, NOAA AR 2069–71, upstream adult migration, NOAA AR 2073–75, and spawning, NOAA AR 2075–76. The BiOp acknowledges that “[e]ggs incubating downstream of Federal dams in the North Santiam[ and] South Santiam . . . rivers are impacted by altered water temperatures, elevated total dissolved gases, and altered river flows affecting their survival[.]” NOAA AR 2055. But the BiOp further explains that, “[f]or winter steelhead, the impacts on egg incubation are not as great because spawning is widespread throughout the entire population’s range (mainstem rivers and all tributaries)” and because winter steelhead “spawn in late winter/early spring after the peak of winter storm events,” when water temperatures are low. *Id.* Again, because the BiOp measures impacts to the entire listed winter steelhead DPS (including two other winter steelhead populations not affected by dams), not just in parts of the river, NMFS’s conclusion that “[m]ost of the incubating eggs are not exposed to unnatural conditions” is rational and supported by the record. *Id.*

The BiOp also addresses the environmental baseline with respect to juvenile winter steelhead rearing, including in degraded or lost habitat below the dams. Although juvenile winter steelhead “generally rear in the upper headwater areas, they are susceptible to the same threats and limiting factors that are affecting spring Chinook salmon juveniles,” including the loss of rearing habitat in “side channels, backwater sloughs, and wetlands.” NOAA AR 2060. Finally, although Plaintiffs allege that the BiOp does not discuss the effect of the environmental baseline on adult winter steelhead, *id.* at 15, Plaintiffs point to no scientific data that NMFS failed to consider. NMFS must address the environmental baseline using the best scientific data available, but it need not create data where none exists. *See Native Fish Soc’y v. NMFS*, 992 F. Supp. 2d

1095, 1111 (D. Or. 2014) (“[T]he ESA does not require NMFS to develop information, only to consider the best evidence available.” (citations omitted)).

Here, NMFS correctly analyzed the effects of the proposed agency action against the existing baseline condition of winter steelhead in the Upper Willamette River and concluded that the summer steelhead hatchery program would not jeopardize the existence of winter steelhead.

**B. The BiOp correctly accounted for hatchery summer steelhead impacts on winter steelhead.**

The BiOp identified two primary ways that the summer steelhead hatchery program could affect winter steelhead: through interactions between hatchery summer steelhead and winter steelhead on spawning grounds (*i.e.*, genetic effects) and in juvenile rearing areas (*i.e.*, ecological effects).<sup>8</sup> NOAA AR 2096, 2079. The BiOp then analyzed the risks from interactions between hatchery summer steelhead and winter steelhead. NOAA AR 2121–66 (analyzing genetic effects), 2166–82 (analyzing ecological effects). The BiOp concluded that the mitigation measures incorporated in the proposed action would further reduce interactions between hatchery summer steelhead and winter steelhead on spawning grounds and in juvenile rearing areas, which were already low. NOAA AR 2098–100, 2165–82.

The BiOp then evaluated four population-level performance measures that relate to the survival and recovery of winter steelhead: abundance, productivity, diversity, and spatial structure. NOAA AR 2195; *see also* NOAA AR 2077–78. After analyzing the genetic and ecological effects of hatchery summer steelhead on winter steelhead, the BiOp found that hatchery summer steelhead would have a negative effect on diversity of winter steelhead populations in the North Santiam and South Santiam Rivers and a negligible effect on the other performance measures. NOAA AR 2195. Ultimately, the BiOp concluded that “[t]he proposed

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<sup>8</sup> The BiOp also identified three other ways that the summer steelhead hatchery program could affect winter steelhead—broodstock collection; hatchery research, monitoring, and evaluation; and the operation, maintenance, and construction of hatchery facilities—and found that the effects of the summer steelhead hatchery program on winter steelhead from these risk factors would be negligible. NOAA AR 2096, 2079, 2097, 2099–101, 2109–110, 2185–87.



action only represents relatively minor increases in risks to the North Santiam and South Santiam populations and these populations are at moderate risk. Therefore, the proposed action will not change the risk levels for any population in the DPS.” NOAA AR 2196.

Plaintiffs’ challenges to the BiOp’s reliance on mitigation measures outlined in the HGMP and the BiOp’s analysis of genetic introgression, competition, and predation, Pls.’ Br. at 19–32, are meritless. NMFS reasonably relied on the mitigation measures and other evidence in the record in evaluating the genetic and ecological impacts of the summer steelhead hatchery program, and rationally concluded that it is not likely to jeopardize winter steelhead.

**1. NMFS reasonably relied on mitigation measures in the HGMP in evaluating the proposed action.**

NMFS may reasonably rely on mitigation measures in its analysis if such measures constitute a “clear, definite commitment of resources” and are “under agency control or otherwise reasonably certain to occur.” *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 743 (9th Cir. 2020) (quoting *Nat’l Wildlife Fed’n*, 524 F.3d at 936 & n.17). Such is the case here. The terms of the HGMP, including mitigation measures, were incorporated into the proposed action. USACE AR 6597–98. These mitigation measures—advancing spawn timing, reducing releases in the South Santiam River, and terminating recycling—had “been implemented recently” or “w[ould] be implemented” under the HGMP. NOAA AR 2009. Finally, the terms and conditions of the BiOp’s ITS require ODFW to “implement the reform actions included in the summer steelhead HGMP (2018).” NOAA AR 2207.

For the advancing spawn timing mitigation measure, the HGMP proposes a “target completion date” of “Dec[ember] 31st” for spawning broodstock. USACE AR 6589. The BiOp summarized this mitigation measure, stating that “[t]he broodstock spawn timing is also proposed to be advanced even further than in recent years[,] with all of the broodstock spawned by the first of January for the 2018–2019 summer steelhead brood year.” NOAA AR 2147. This mitigation measure is reasonably certain to be achieved because ODFW has been in the process of implementing “a management change . . . to shift the spawn timing of hatchery summer

steelhead even earlier in order to further separate the spawn timing of summer steelhead from winter steelhead” since 2013. NOAA AR 2141; *see also* NOAA AR 2130 (Figure 44, showing conceptual diagram of potential overlap in summer and winter steelhead program spawn timing). The BiOp describes this management change as “effective” and notes that “the majority of summer steelhead now exhibit[] a December spawn timing.” *Id.*; *see also* NOAA AR 2142 (Figure 54, showing spawn timing of hatchery summer steelhead broodstock at South Santiam hatchery from 2006–2018); NOAA AR 2143 (Figure 55, showing that 66% of summer steelhead broodstock were spawned in December from 2013–2018 compared to 31% from 2006–2012). Given these statements and this data, the mitigation measure to advance spawn timing represents a detailed plan that is reasonably certain to occur, not just a “generalized contingenc[y] or gesture at [a] hopeful plan[.]” *Ctr. for Biological Diversity*, 982 F.3d at 743. Plaintiffs’ assertions to the contrary are irrelevant and unsupported. Pls.’ Br. at 30–31.

The same is true of the other mitigation measures incorporated in the proposed action. In describing the proposed annual fish release levels, the HGMP notes that “releases *are being temporarily reduced* in the South Santiam by 25%—to 121,000,” USACE AR 6591 (emphasis added), and explicitly states that “[t]he proposed current release is 121,000 smolts,” USACE AR 6592. The HGMP further explains that “the same level of reduction . . . occurred in the North Santiam with 2010 releases” and that “ODFW will consider reinstating” or “further reduc[ing]” hatchery summer steelhead releases only if the results of proposed and planned research on risks to winter steelhead populations show that such changes are warranted. USACE AR 6591. And the HGMP also expressly provides that “ODFW *will suspend* the recycling programs in the Santiam Basin until there is evidence that the programs present little risk to winter steelhead (whether from introgression or from naturally produced summer steelhead).” USACE AR 6594 (emphasis added). Although the HGMP provides for possible future changes to the action if new scientific data support such changes—which makes sense since “[i]n the Santiam Basin the program will continue for an undefined period into the future,” USACE AR 6595—these statements indicate that the mitigation measures are reasonably certain to occur as part of the

proposed action evaluated in this BiOp. Moreover, any potential future changes to the action would trigger reinitiation of consultation with NMFS. *See Ctr. for Biological Diversity*, 982 F.3d at 743 (“If an action agency fails to carry out the mitigation measures contained in a BiOp, it must re-initiate consultation with [NMFS].” (citations omitted)); 50 C.F.R. § 402.16(c). Indeed, the terms and conditions of the ITS *require* ODFW to obtain “written concurrence [for] any changes to the summer steelhead hatchery program” from NMFS before ODFW may implement any such changes, including “increasing the stocking levels for the summer steelhead program.” NOAA AR 2207.

Finally, Plaintiffs misleadingly imply that NMFS relied on the HGMP’s proposed standard to minimize genetic impacts on winter steelhead by limiting gene flow to less than 2%, as if the gene flow standard were a mitigation measure, rather than a result of these measures’ success in reducing summer steelhead and winter steelhead interactions. Pls.’ Br. at 29–30. While NMFS described “[m]anaging gene flow . . . to less than 2%” as a management change under the proposed action, NMFS did not simply take for granted that the hatchery program was reasonably certain to achieve that gene flow standard. NOAA AR 2010; *see also* USACE AR 6587. Instead, NMFS acknowledged that “[t]he proposed action includes a standard to limit gene flow from hatchery summer steelhead to winter steelhead populations to less than 2%.” NOAA AR 2122. Then, as described below, NMFS thoroughly evaluated the potential genetic effects of the proposed action on winter steelhead, NOAA AR 2121–66, and reasonably concluded “that the current effects of the hatchery summer steelhead [on winter steelhead genetics] are currently low and will be even lower in the future as the proposed action (and terms and conditions of this opinion) are implemented,” NOAA AR 2166. Based on this analysis, the ITS “authorizes the proposed action, which is less than 2%” gene flow. NOAA AR 2201. The terms and conditions of the ITS require ODFW to implement the mitigation measures (“reform actions”) in the HGMP, including the three discussed in this section, and specifies that the measures “are expected to further reduce the effects of this hatchery program and equate to less than 2% gene flow in any winter steelhead population in the DPS.” NOAA AR 2207. If gene flow exceeds the

2% limit in the HGMP and ITS, the terms and conditions state that “further reductions in the release of hatchery summer steelhead in these rivers shall be implemented.” *Id.*

The mitigation measures incorporated into the proposed action here are a far cry from the “sincere general commitment[s] to future improvements” that the Ninth Circuit found insufficient in *National Wildlife Federation*. 524 F.3d at 935–36. NMFS appropriately relied on the mitigation measures in the HGMP in evaluating the summer steelhead hatchery program’s genetic and ecological effects on winter steelhead and finding that the program is not likely to jeopardize winter steelhead.

## **2. The BiOp fully analyzed existing and future genetic introgression.**

With respect to interactions on spawning grounds, the BiOp acknowledged that hatchery summer steelhead not harvested or collected at fish traps can spawn naturally where the Upper Willamette River winter steelhead DPS occurs in the North Santiam and South Santiam Rivers. NOAA AR 2098. Although hatchery summer steelhead and winter steelhead may spawn together, leading to genetic introgression or hybridization, “the temporal overlap in spawn timing” between hatchery summer steelhead and wild winter steelhead is low, and genetic analyses show “a low degree of interbreeding between summer and winter steelhead in areas where hatchery fish are released.” NOAA AR 2099. Indeed, though summer steelhead are not native to the Upper Willamette River, summer steelhead and winter steelhead co-occur naturally in many populations in the Pacific Northwest, suggesting that gene flow between the two run types is low because the “temporal separation between spawning periods effectively isolates the run types and does not allow interbreeding to occur for the majority of the spawning.” NOAA AR 2164. After reviewing recent genetic sampling studies on the existing genetic structure of winter steelhead in the Upper Willamette River, NOAA AR 2122–29, and using multiple methods to calculate historical and current gene flow, NOAA AR 2148–64, the BiOp rationally concluded that the current interbreeding effects of the hatchery program are low and will be even lower going forward because of the mitigation measures in the proposed action, NOAA AR 2165–66.

In challenging the BiOp's analysis of genetic impacts of hatchery summer steelhead on winter steelhead, Plaintiffs contend (1) that the BiOp fails to account for the effects of past interbreeding between summer steelhead and winter steelhead, Pls.' Br. at 25–26, and (2) that the BiOp incorrectly concluded that the program would achieve the less than 2% gene flow standard in the HGMP and ITS, *id.* at 29–30. Neither argument withstands scrutiny.

**i. The BiOp addressed the best available scientific data from genetic sampling studies to account for existing genetic introgression.**

First, Plaintiffs erroneously argue that the BiOp fails to account for existing levels of genetic introgression, pointing to hybridization rates between summer and winter steelhead from genetic sampling studies conducted on steelhead in the Upper Willamette River basin. *Id.* at 26 (citing Johnson et al. (2013), Johnson et al. (2018), and Weigel et al. (2018)). NMFS evaluated the existing genetic structure of winter steelhead in the Upper Willamette River and considered all these studies, among others, in doing so. NOAA AR 2122–29; *see* NOAA AR 2124–25 (citing Johnson et al. (2013)), 2126–28 (citing Johnson et al. (2018) and Weigel et al. (2018)). The BiOp addresses the “uncertainty (and likely errors) in correctly classifying hybrids of summer and winter steelhead” in some of these recent studies, which “show relatively high introgression of summer steelhead in population areas where summer steelhead do not occur,” suggesting that “the assumptions used for identifying hybrid steelhead” may not be entirely “correct” and may overestimate the level of genetic introgression. NOAA AR 2129. NMFS explained that, “[i]n our opinion,” these studies, including Johnson et al. (2018) and Weigel et al. (2018), “attribute effects of hatchery steelhead programs on [winter steelhead in the Upper Willamette River] that are difficult to support given the available information.” NOAA AR 2161.

After considering these studies and others, the BiOp found that, although the data show that hatchery summer steelhead and winter steelhead have been interbreeding “since the hatchery program has been in existence,” winter steelhead populations in the Upper Willamette River “still exhibit unique genetic structure.” NOAA AR 2129. By showing that winter steelhead in the

Upper Willamette River are “genetically distinct from hatchery steelhead,” NMFS concluded that these genetic sampling studies “help validate the findings in [the BiOp] that the current effects of the hatchery summer steelhead are currently low and will be even lower in the future as the proposed action (and terms and conditions of this opinion) are implemented.” NOAA AR 2166. NMFS’s expert scientific judgment about the weight to assign the genetic sampling studies of winter steelhead in assessing the impact of existing genetic introgression is entitled to deference. *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 992 (9th Cir. 2014) (“The APA gives an agency substantial discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.” (internal quotation marks and citation omitted)).

**ii. The BiOp correctly estimated gene flow.**

Plaintiffs’ second argument—that the BiOp miscalculates gene flow from summer steelhead into winter steelhead and somehow permits a pHOS<sup>9</sup> level that will exceed the less than 2% gene flow rate proposed in the HGMP and authorized by the ITS—is flatly wrong. Pls.’ Br. at 29–30. The BiOp’s analysis showed that estimates of gene flow are “relatively low, even under assumptions that would overestimate the impacts of the program.” NOAA AR 2165. Based on data from Johnson et al. (2013), NMFS found that “[o]ver the long-term (the entire period of time the hatchery program has been conducted), average [annual] gene flow ranges from 0.65% to 1.4% for the South Santiam and North Santiam winter steelhead populations, respectively.” *Id.*; *see also* NOAA AR 2159 (citing Johnson et al. (2013)). And NMFS expected that the mitigation measures included in the proposed action—“reductions in the South Santiam releases, broodstock spawn timing advances, and acclimation in the North Santiam River” to increase the likelihood that summer steelhead return to the Minto Fish Collection Facility—

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<sup>9</sup> pHOS is the “proportion of natural spawners (throughout the entire spawning of both summer and winter steelhead) that are of hatchery origin.” NOAA AR 2148; *see also* NOAA AR 2085 (“[T]he term pHOS refers to the proportion of the total natural spawning population consisting of hatchery fish[.]”) It “is often used as a surrogate measure of gene flow.” NOAA AR 2082.

would “reduce impacts of the hatchery steelhead program to the lowest levels ever observed.” NOAA AR 2165.

Plaintiffs argue that the BiOp “used flawed assumptions” in calculating gene flow using the Scott-Gill method. Pls.’ Br. at 29. Not so. The BiOp explained that “the Scott-Gill method estimates the *current* rate of gene flow and *expected* rate of gene flow . . . . In other words, the effects analysis addresses *how much gene flow is occurring or will occur, not how much may have occurred in the past*[.]” NOAA AR 2153 (emphasis added). Plaintiffs’ analysis cherry-picked old pHOS estimates, from years before acclimated summer steelhead began returning to the rebuilt fish traps, which are not appropriate or reliable inputs for evaluating current or expected gene flow under the proposed action. Pls.’ Br. at 29. In contrast, NMFS reasonably used “a range of pHOS values from 10% to 30% . . . corresponding to a range of conditions observed naturally” in the North Santiam and South Santiam Rivers to calculate gene flow. NOAA AR 2154; NOAA AR 2149. Using those pHOS values, gene flow rates ranged from 1.8% to 5.7%. NOAA AR 2154.

NMFS acknowledged that “[t]he most sensitive input value for the gene flow calculation is pHOS.” *Id.* Conversely, NMFS found that gene flow rates “are relatively insensitive to changes in  $O_N$  and  $O_H$ ”<sup>10</sup> and that increasing the proportion of overlap (and therefore increasing the input values for  $O_N$  and  $O_H$ ) increased the calculated gene flow only “slightly.” *Id.* Thus, Plaintiffs’ assertion that the BiOp considered “an overly-constricted overlap period” in arriving at the inputs for  $O_N$  and  $O_H$ , Pls.’ Br. at 30, is not just false but immaterial.

So is Plaintiffs’ contention that the HGMP “allows a summer steelhead pHOS level that cannot meet the less than 2% gene flow standard.” *Id.* The BiOp neither relies on nor permits any

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<sup>10</sup> Whereas “pHOS is the proportion of natural spawners (throughout the entire spawning of both summer and winter steelhead) that are of hatchery origin,” “ $O_N$  represents the proportion of winter steelhead and  $O_H$  is the proportion of summer steelhead in the overlap zone,” *i.e.*, where the latest-spawning summer steelhead co-occur with the earliest spawning winter steelhead in space and time. NOAA AR 2148; *see also* NOAA AR 2130 (Figure 44, showing conceptual diagram of potential overlap in summer and winter steelhead program spawn timing).



particular pHOS level because the ITS does not rely on pHOS as a surrogate measure of incidental take. Instead, it exempts incidental take through interbreeding from liability under ESA Section 9, assuming “the proportion of natural-origin winter steelhead mating with hatchery-origin summer steelhead” is less than 2% in every population based on a three-year arithmetic mean. NOAA AR 2200–01. If gene flow meets or exceeds 2%—regardless of the pHOS level—reinitiation of consultation will be triggered.

Finally, Plaintiffs ignore that the BiOp used multiple methods to evaluate genetic effects, all of which “calculate gene flow in the range of zero to 1.8% assuming 10% pHOS” (and “[i]n recent years, pHOS has been near zero”). NOAA AR 2160. For example, the BiOp analyzed genetic information from Johnson et al. (2013) about the proportions of the genome assigned to summer steelhead in the North Santiam and South Santiam populations. NOAA AR 2159. “For the North Santiam population, 15.7% of the sampled genome assigned to summer steelhead,” leading to an annual gene flow estimate of 1.4% over the past 48 years the summer steelhead hatchery program has been in operation. *Id.* “For the South Santiam population, 7.4% of the sampled genome assigned to summer steelhead,” generating an annual gene flow estimate of 0.5% over the same time period. *Id.* The BiOp also noted that samples collected after 2000 had less of their genome assigned to summer steelhead than samples collected before 2000, which “suggests hatchery management reforms implemented since ESA-listing may be reducing the impacts of the hatchery program on ESA-listed winter steelhead populations.” *Id.*

In sum, Plaintiffs fail to demonstrate any error in NMFS’s analysis of genetic effects. Plaintiffs merely disagree with NMFS’s scientific judgment on this issue, which is not enough to establish that NMFS failed to use the best scientific data available under the deferential standard of review. *See Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 833 F.3d 1136, 1148 (9th Cir. 2016) (“Mere differences in opinion . . . are not sufficient grounds for rejecting the analysis of agency experts.” (citation omitted)).



### 3. The BiOp fully analyzed ecological interactions.

As for interactions in juvenile rearing areas, the BiOp described impacts on winter steelhead because of (1) competition between hatchery summer steelhead and winter steelhead for food and space and (2) hatchery summer steelhead predation on winter steelhead. NOAA AR 2099–100. Hatchery summer steelhead and winter steelhead overlap spatially in mainstem rivers below the dams, where hatchery summer steelhead are released and gather to emigrate to the ocean. *Id.* But after analyzing the ecological effects of hatchery summer steelhead (and their progeny) on winter steelhead, NOAA AR 2166–82, NMFS rationally concluded that the “overall effect of competitive interactions between hatchery and natural fish at the population level is low” because of two factors: (1) hatchery summer steelhead “are released as smolts that are actively emigrating downstream to the ocean” to minimize interactions with winter steelhead, and (2) most of the Upper Willamette River winter steelhead DPS rearing habitat is not exposed to releases of hatchery summer steelhead. NOAA AR 2100.

In challenging the BiOp’s analysis of ecological impacts of hatchery summer steelhead on winter steelhead, Plaintiffs contend (1) that the BiOp “downplays predation by released summer steelhead yearlings” and adult summer steelhead on winter steelhead fry, Pls.’ Br. at 20–21, (2) that the BiOp incorrectly concluded that competition between released summer steelhead yearlings and winter steelhead fry will have a low effect on winter steelhead, *id.* at 21–22, and ignored displacement of winter steelhead by residual hatchery steelhead, *id.* at 24–25, and (3) that the BiOp’s Predation-Competition-Disease (“PCD”) Risk model used inappropriate inputs, *id.* at 22–23. Again, none of these arguments withstand scrutiny.

#### i. The BiOp rationally concluded that predation effects were low.

The BiOp analyzes the risks of predation on Upper Willamette River Chinook salmon and winter steelhead “from all of the proposed hatchery programs combined.” NOAA AR 2180. Hatchery summer steelhead pose the greatest predation risk to Chinook salmon fry. *Id.* In contrast, the BiOp finds that “[r]isks to *winter steelhead fry* (age-0) are *negligible* due to their later emergence timing in late spring-early summer after hatchery fish have emigrated to the

ocean.” *Id.* (emphasis added). Indeed, the BiOp emphasizes that “[a]ge-0 steelhead are still incubating in redds in the gravel during the period of hatchery steelhead release and thus are not susceptible to predation.” *Id.*; USACE AR 6601 (winter steelhead peak spawning occurs in April or May), 6648–50 (hatchery summer steelhead releases in the North Santiam and South Santiam Rivers occur in early-to-mid-April).

Plaintiffs’ arguments about predation risk to winter steelhead rely on generalizations about “heavy predation” from a literature review by Naman and Sharpe (2012). Pls.’ Br. at 20–21 (citing NOAA AR 2091<sup>11</sup>). That literature review included one study (Naman (2008)) that found a high predation rate of hatchery steelhead in the Trinity River in California on *Chinook and coho salmon* subyearlings, likely because the early hatchery steelhead release date and release location, “directly adjacent to several thousand salmonid redds,” meant that there was “spatial and temporal overlap of predator and prey.” NOAA AR 6959 (emphasis added); *see also* Pls.’ Br. at 20 (citing NOAA AR 6959). But given the BiOp’s explanation that hatchery summer steelhead releases occur when winter steelhead are still incubating—and thus that there is no spatial and temporal overlap of predator and prey—Plaintiffs fail to explain how the findings from Naman (2008) negate the BiOp’s conclusion that the risk of hatchery summer steelhead preying on winter steelhead fry is negligible.

The BiOp also acknowledged that “[a] small proportion of hatchery steelhead (<10%) are likely to residualize near the hatchery and never emigrate to the ocean,” and that those summer steelhead prey on winter steelhead. NOAA AR 2100; *see also* NOAA AR 2178–79, 2182. As explained below in Section V.A, Plaintiffs’ misleadingly overstate the rate of residualism. Pls.’ Br. at 21 (citing NOAA AR SUP 1569). Moreover, Plaintiffs are wrong that the BiOp does not address the effects of predation by residual hatchery summer steelhead. The BiOp acknowledges that “residual steelhead can continue to prey upon age-0 salmon and steelhead fry,” but

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<sup>11</sup> Plaintiffs refer to “Naman (2010),” but no such study appears in the BiOp. The BiOp cites Naman and Sharpe (2012) at NOAA AR 2091 and 2180.

concludes that predation losses are “expected to be very low because of the low proportion of available habitat affected by residual steelhead below the hatchery facilities.” NOAA AR 2182.

**ii. The BiOp rationally found that competition effects were low.**

The BiOp assesses the effects of competition between hatchery summer steelhead and winter steelhead primarily through the PCD Risk model discussed further below. NOAA AR 2166–79. The PCD Risk model simulates competition for food. In the model, “a competition event means that a fish does not eat for a day, and suffers some weight loss as a result.” NOAA AR 2168. Repeated competitive interactions over the course of the four-day interaction period for summer steelhead and winter steelhead in the North Santiam and South Santiam Rivers will cause a given fish to lose a small percentage of weight. NOAA AR 2168, 2170. The model then reports “‘competition equivalent’ deaths”—the number of fish that would die if the total weight loss of all winter steelhead due to competitive interactions with hatchery summer steelhead “were concentrated into individual fish to reach lethal levels[.]”<sup>12</sup> NOAA AR 2168.

The PCD Risk model simulated annual losses of 1,130 juvenile winter steelhead (34 adult fish equivalents) in the Upper Willamette River from all hatchery releases (spring Chinook and summer steelhead). NOAA AR 2178. Based on the model’s results, the BiOp found that most of the ecological effects of hatchery summer steelhead on winter steelhead occurred through competition (rather than through predation), largely because hatchery summer steelhead are released in April, “when water temperatures are higher and metabolism is also higher resulting in the need for greater food consumption.” NOAA AR 2177.

Plaintiffs challenge the BiOp’s competition analysis and contend that the BiOp ignores displacement of winter steelhead, but their arguments merely cobble together various general assumptions about temporal and spatial overlap between hatchery summer steelhead and winter

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<sup>12</sup> For example, assume a fish would die from weight loss after 10 competitive interactions. If 100 total competitive interactions occur in one run of the PCD Risk model, that run would result in 10 competition equivalent deaths.

steelhead.<sup>13</sup> Pls.’ Br. at 22, 24–25. Plaintiffs point to no available scientific data on competition or displacement that the BiOp failed to address. And because NMFS “has substantial discretion to choose between available scientific models, provided that it explains its choice,” Plaintiffs have no basis to challenge the BiOp’s use of the PCD Risk model to estimate the magnitude of ecological effects, including competition. *San Luis*, 776 F.3d at 997. At bottom, Plaintiffs simply fail to launch a valid critique of the BiOp’s analysis of competition and its conclusion that competition effects on winter steelhead are low.

### iii. The PCD Risk model used appropriate inputs.

The BiOp uses the PCD Risk model to simulate predation and competition on winter steelhead from hatchery summer steelhead from the point of release to the mouth of the Columbia River. NOAA AR 2167. While the results of the model “should not be considered estimates of the actual predation and competition impact,” they show “the magnitude of interactions that could occur under a certain set of assumptions.” *Id.*; *see also* NOAA AR 2177.

Although Plaintiffs criticize the BiOp’s use of various inputs—the number of days of interaction, the predator-to-prey length ratio for predation, and the piscivory rate, Pls.’ Br. at 22–23 (citing NOAA AR 2178,<sup>14</sup> 2169)—NMFS had a rational basis for using each of these inputs. First, the BiOp explains that hatchery and natural-origin fish interactions in the tributary mainstem rivers are “expected to last three to [ten] days” because “[t]he vast majority of the hatchery smolts emigrate” within seven to ten days, based on the best scientific data available. NOAA AR 2177 (citing Schreck et al. (1994)). Given this information, the BiOp’s use of four days of interaction for steelhead in those areas is reasonable.<sup>15</sup> NOAA AR 2170. Second, the

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<sup>13</sup> Some of these assumptions are wrong. For example, the BiOp states that “27 percent of critical habitat (total river miles) for the [Upper Willamette River] spring Chinook salmon ESU is affected by hatchery fish. . . . For the winter steelhead DPS, the affected area is less.” NOAA AR 2170.

<sup>14</sup> Plaintiffs cite NOAA AR 2178 for the number of days of interaction, but that information is found at NOAA AR 2170, as noted below.

<sup>15</sup> As to Plaintiffs’ argument that this input does not account for residualism, the BiOp addressed this limitation of the PCD Risk model, acknowledging the risk of hatchery summer steelhead

predator-to-prey length ratio comes from Daly et al. (2014), NOAA AR 2169 (citing Daly et al. (2014)), and Plaintiffs do not explain why the ratio used is inappropriate or point to available scientific data NMFS did not consider. Third, although not listed with other piscivory rates values provided in Table 29 of the BiOp, *see* NOAA AR 2169, the PCD Risk model used a piscivory rate of 0.002 for summer steelhead predation on winter steelhead fry. But again, NMFS determined that summer steelhead predation on winter steelhead fry is very low because the fish are not present together (spatially or temporally) to any meaningful degree.

In sum, NMFS used “conservative” assumptions in the PCD Risk model that “over-estimat[e] effects” of hatchery summer steelhead predation and competition on winter steelhead, and Plaintiffs’ baseless critiques do not show otherwise. NOAA AR 2178.

**V. Plaintiffs’ other arguments challenging the no-jeopardy determination are contrary to law and contradicted by the record.**

Attempting to sidestep NMFS’s reasoned and well-supported analyses, Plaintiffs mischaracterize the BiOp and the record in several respects. As described above, Plaintiffs’ arguments present an inaccurate picture of the spatial and temporal overlap between hatchery summer steelhead and wild winter steelhead because Plaintiffs ignore critical facts, including the mitigation measures implemented to reduce the interactions between hatchery summer steelhead and winter steelhead. And as part of their attack on the no-jeopardy determination, Plaintiffs raise an additional series of erroneous arguments challenging NMFS’s use of the best scientific data available on the number of summer steelhead that return to and remain in the North Santiam and South Santiam Rivers, the rate at which summer steelhead residualize, and the impact of fishing on winter steelhead. Pls.’ Br. at 15–19. Plaintiffs also mischaracterize the BiOp’s discussion of climate change, *id.* at 26–28, and launch baseless critiques of the ITS, *id.* at 32–36. All these arguments lack merit and should be rejected by the Court as explained below.

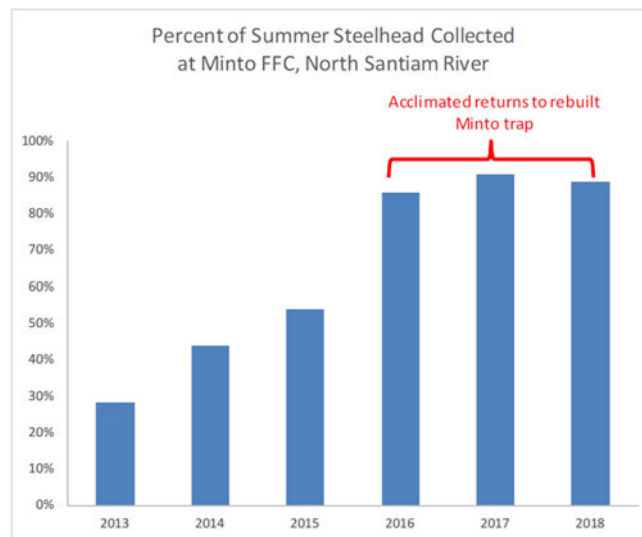
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smolts “residualizing below the point of release and never emigrating as smolts to the ocean.” NOAA AR 2178. The BiOp then described management steps in the proposed action to minimize residualism and concluded that “it is still expected residualism of hatchery steelhead will occur at a low level, with densities being highest near the hatchery facility and decreasing further downstream.” NOAA AR 2178–79.

**A. NMFS used the best data available.**

NMFS fully complied with the ESA’s requirement to use the “best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2). This provision requires NMFS to consider only the available scientific information. *See, e.g., Kern Cnty. Farm Bureau v. Allen*, 450 F.3d 1072, 1081 (9th Cir. 2006) (“Without any evidence in the record that [NMFS] ignored relevant information, we hold that [NMFS] satisfied its duty to base its listing determinations on the best available data.”). Plaintiffs’ arguments to the contrary are wrong and should be rejected.

First, Plaintiffs are simply wrong that the BiOp “fails to estimate how many returning summer steelhead adults do not get caught or enter traps[.]” Pls.’ Br. at 16. The BiOp states that the number of hatchery summer steelhead not caught or collected in fish traps in the North Santiam River was 752 fish in 2016, 52 fish in 2017, and 199 fish in 2018. NOAA AR 2157. The numbers from these years reflect two mitigation measures incorporated in the proposed action: (1) acclimation of hatchery summer steelhead at the Minto Fish Collection Facility before releasing them as smolts to increase the likelihood that the fish will return to the fish traps, and (2) improved collection efficiency at rebuilt fish traps at the Minto Fish Collection Facility. *Id.* Figure 2 below shows the percentage of hatchery summer steelhead collected in fish traps at the Minto Fish Collection Facility, calculated as the number of summer steelhead collected divided by the number of summer steelhead counted at Bennett Dam on the North Santiam River.



**Figure 2** (NOAA AR 2158, Figure 61)

As Figure 2 illustrates, “[a] high percentage of summer steelhead returning to the North Santiam River are actually collected and not available to spawn naturally and thus the proposed action substantially reduces the risks of pHOS.” NOAA AR 2157. Because the same mitigation measures (acclimation before smolt release and improved fish traps) are in place at the Foster Fish Collection Facility in the South Santiam River, collection efficiency in the South Santiam River is expected to be similar.<sup>16</sup> Plaintiffs’ calculations misleadingly rely on outdated data from before the fish traps at the Minto Fish Collection Facility in the North Santiam River and the Foster Fish Collection Facility in the South Santiam River were rebuilt in 2014 and before smolts were acclimated to the location of the fish traps prior to their release, a process that started in 2014. Pls.’ Br. at 16.

Second, although Plaintiffs assert that NMFS failed to use the best scientific data available to estimate the rate at which summer steelhead residualize and remain in the river, Plaintiffs do not point to any scientific evidence that NMFS did not consider. Pls.’ Br. At 17. Instead, Plaintiffs erroneously contend that NMFS misinterpreted Harnish et al. (2014) in finding that “residualism rates for hatchery summer steelhead [are] probably less than 10%.” *Id.* (quoting NOAA AR 2152). Although the “*radio-tagged* hatchery steelhead juveniles” in the Harnish study residualized at a rate of at least 12.8%, NOAA AR SUP 1569 (emphasis added), NMFS reasonably found that hatchery summer steelhead in general are likely to residualize at a lower rate. For example, the BiOp noted that “only 25% (approximately) of the radio tagged hatchery steelhead [in Harnish et al. (2014)] were detected at Willamette Falls [after release into the South Santiam River], which raises concerns about the efficacy of the methods used to derive the estimates[,]” as “[a] much greater proportion of hatchery steelhead should have been observed emigrating.” NOAA AR 2179. Indeed, the Harnish study itself “recognize[d] there may have been issues with the representativeness of the radio-tagged fish to the general hatchery population.” NOAA AR SUP 1718. Because a larger percentage of radio-tagged fish failed to

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<sup>16</sup> The precise efficiency cannot be calculated because there are no counting facilities downstream of Foster Dam in the South Santiam River (unlike Bennett Dam in the North Santiam River).



“volitionally migrate” from the hatchery compared to the general hatchery population (17.6% compared to ~1%), the Harnish study surmised that “it is possible the radio-tagged fish also residualized in the river at a higher rate than the general hatchery population.” *Id.* Based on observations of hatchery summer steelhead during snorkel surveys Harnish conducted, Harnish concluded that the 12.8% residualism rate observed for radio-tagged hatchery summer steelhead in the study “seems to be an overestimate” as applied to the general population of hatchery summer steelhead. *Id.*; *see also* NOAA AR SUP 1719 (noting that “we may have overestimated the residualism rate (as it applies to the entire hatchery population) because of a potential tag or tagging effect”).

Taking these limitations of the Harnish study into account, NMFS reasonably concluded that “residualism rates for hatchery summer steelhead [are] probably less than 10%.” NOAA AR 2152; *San Luis*, 776 F.3d at 995 (“An agency complies with the best available science standard so long as it does not ignore available studies, *even if it disagrees with or discredits them.*” (citing *Kern Cnty.*, 450 F.3d at 1081) (emphasis added)). And because the 12.8% residualization rate in the Harnish study does not apply to the general hatchery summer steelhead population, Plaintiffs’ calculation that “at least 15,488 [summer steelhead] residualize annually” in the North Santiam and South Santiam Rivers is wrong and overestimates the number of summer steelhead that residualize.<sup>17</sup> Pls.’ Br. at 17.

Third, Plaintiffs grossly exaggerate and misrepresent the harm to winter steelhead caused by fishing. *Id.* at 18–19. The BiOp reasonably found that “[t]he current exploitation rates on wild steelhead from sport fisheries are in the range of 0–3%.” NOAA AR 2053; *see also* NOAA AR 2073 (“For winter steelhead, all populations experience less than 5% impact from freshwater fisheries[.]”), 2037 (similar). Plaintiffs attempt to challenge this conclusion by pointing to a study (Hooton (1987)) that found that an average of 8% of the winter steelhead *caught and released*—not 8% of the entire winter steelhead population—die as a result of fishing. Pls.’ Br. at

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<sup>17</sup> Plaintiffs repeat the erroneous 12.8% residualism rate throughout their brief in support of their various arguments about the BiOp’s analyses. *See, e.g.*, Pls.’ Br. at 21, 23, 37.



18 (citing NOAA AR SUP 478). Assuming this 8% mortality rate applies to the winter steelhead caught and released in the Upper Willamette River basin, Plaintiffs fail to prove NMFS's conclusion wrong. The highest catch rate recorded for winter steelhead between 1983 and 1997 was about 30%. NOAA AR SUP 474, 477, 1765. Even assuming a catch rate of 30% and a mortality rate of 8% for winter steelhead caught and released, this only amounts to mortality from fishing of 2.4% of the winter steelhead population, which is indeed less than 5%, and within the 0 to 3% range that NMFS found. Plaintiffs' application of the 8% catch-and-release mortality rate to the entire winter steelhead adult population, rather than to just those winter steelhead caught and released, is inaccurate and misleading. The same is true of Plaintiffs' assertions about catch-and-release mortality rates for juveniles and about the critical area hookings that can occur if bait and treble hooks are used. Pls.' Br. at 19.

In sum, NMFS used the best scientific data available in evaluating the impacts of the summer steelhead hatchery program on winter steelhead and the Court should reject Plaintiffs' arguments to the contrary. *See Salmon Spawning & Recovery All.*, 342 F. App'x at 339 (declining to "second guess" a no-jeopardy finding by NMFS that relied on a comprehensive analysis of the available scientific data).

**B. The BiOp appropriately addressed climate change.**

Plaintiffs likewise lack support for their argument that the BiOp fails to evaluate how climate change will impact winter steelhead. *Id.* at 26–28. To begin, Plaintiffs' misleadingly compare the BiOp here to the one in *Western Watersheds Project v. McKay*, in which the court found that "[t]he BiOp does not account for climate change as a cumulative effect or baseline condition," even though "documents in the record" showed "potential climate change effects." No. 22-35706, 2023 WL 7042541, at \*2 (9th Cir. Oct. 26, 2023). Unlike in *Western Watersheds Project*, the BiOp here in fact accounted for climate change both as a cumulative effect of future state or private activities reasonably certain to occur within the action area, NOAA AR 2190–91, and as a baseline condition affecting the current range-wide status of listed Upper Willamette River winter steelhead, NOAA AR 2047–49, citing various studies in the record. This simply is

not a case in which “the BiOp altogether failed to engage with information in the record suggesting that climate change would affect” conditions that are “an acknowledged threat” to winter steelhead. *W. Watersheds Project*, 2023 WL 7042541, at \*2.

Although Plaintiffs complain that one of the studies the BiOp cites to support its discussion of the effects of climate change on conditions in the Upper Willamette River—Doppelt (2009)—is outdated and addresses parts of the Upper Willamette River in which the listed Upper Willamette River winter steelhead DPS does not occur, Pls.’ Br. at 26–27, Plaintiffs do not point to any better, available scientific data that NMFS failed to consider. As noted above, NMFS is not required “to conduct new tests or make decisions on data that does not yet exist.” *San Luis*, 776 F.3d at 995. Moreover, the BiOp also considered other, more recent studies on the effects of climate change on salmon and steelhead in the Upper Willamette River, not just Doppelt (2009). *See* NOAA AR 2047 (citing Jaeger et al. (2017)), 2190 (citing Jaeger et al. (2017) and Myers et al. (2018)), 5642–746 (Jaeger et al. (2017)), 9304–29 (Myers et al. (2018)).

Finally, Plaintiffs’ analogy to *Wild Fish Conservancy v. Irving* is inapt. Pls.’ Br. at 27 (citing 221 F. Supp. 3d 1224, 1234 (E.D. Wash. 2016)). In *Wild Fish Conservancy*, the court reviewed a biological opinion about operations at Leavenworth National Fish Hatchery, which is “supported by a complex water management system that includes several existing instream structures” that affect “stream flows into Icicle Creek” and thus the threatened Upper Columbia River steelhead that call Icicle Creek home. 221 F. Supp. 3d at 1229–30. The court found that NMFS erred in analyzing the effects of that hatchery’s future operations and water use based “on the apparent assumption that there will be no change to the hydrology of Icicle Creek,” even though “the best available science, which it discusse[d] elsewhere in the BiOp, suggest[ed] that baseline historical flow averages may not be effective predictors of future flows” because of the impacts of climate change. *Id.* at 1233–34. Unlike the hatchery operations considered in *Wild Fish Conservancy*, the summer steelhead hatchery program here does not affect water flows or water temperature in winter steelhead critical habitat in a way that would exacerbate the effects of climate change on winter steelhead.

The BiOp appropriately addressed climate change in the context of evaluating the effects of the summer steelhead hatchery program.

**C. The ITS includes an appropriate trigger for reinitiation of consultation if necessary to reevaluate the summer steelhead hatchery program.**

In their final argument about the ITS, Plaintiffs erroneously assert that NMFS did not include appropriate triggers for reinitiation of consultation if the expected amount of incidental take is exceeded. Pls.’ Br. at 32–36. Under the ESA’s regulations, the NMFS appropriately used a “surrogate” measure of incidental take for this purpose because “it is not practical to express the amount or extent of anticipated take or to monitor take-related impacts in terms of individuals of listed species.” 50 C.F.R. § 402.14(i)(1)(i).

Plaintiffs’ three complaints about NMFS’s entirely reasonable approach are meritless. First, Plaintiffs assert the take limit unlawfully allows “increases . . . of both the number and size of summer steelhead yearlings beyond what was evaluated in the BiOp.” Pls.’ Br. at 34. Not so. After the sentence specifying that the ITS exempts incidental take up to 10% more than the number of hatchery summer steelhead smolts in the smolt release goal in any given year, the ITS explicitly states that “[t]he effects analysis considered up to this limit annually.” NOAA AR 2201 (emphasis added). The following bullet point further provides that “[t]he five-year rolling average” of summer steelhead smolt releases must not exceed the annual smolt release goal to “ensure[] the effects are within the scope analyzed in the opinion based upon the number of hatchery fish released, while allowing some variability for any particular year[.]” *Id.*

Plaintiffs’ second complaint is that the ITS “fails to set . . . ecological take limits related to summer steelhead that are born in the wild” expressed in terms of pHOS. Pls.’ Br. at 34. Plaintiffs’ reliance on ten-year-old case law and a biological opinion covering the funding of different hatchery programs in a different river basin to support their argument that the best available scientific data on ecological take requires NMFS to set a “pHOS-based ecological take limit” is questionable at best. *Id.* at 35. Moreover, although the ITS does not explicitly set a take

limit in terms of pHOS, the ITS requires the measurement of pHOS to “derive an estimate of the proportion of hatchery steelhead mating with winter steelhead in the wild.” NOAA AR 2201.

Finally, Plaintiffs confusingly assert that the ITS’s surrogate measure for genetic take—current gene flow—“cannot be accurately monitored or reported.” Pls.’ Br. at 36. But the ITS clearly states that gene flow “will be monitored annually by observing counts of summer and winter steelhead throughout the [Upper Willamette River], observing the collection of hatchery summer steelhead at the fish collection facilities, [and] observing spawn timing of summer steelhead at the hatcheries to derive an estimate of the proportion of hatchery steelhead mating with winter steelhead in the wild.” NOAA AR 2201. Indeed, as explained above, the BiOp’s genetic analysis used multiple methods of calculating gene flow, including pHOS-based calculations and genetic sampling studies. NOAA AR 2148–55, 2159 (citing Johnson et al. (2013)). It is true that the terms and conditions of the ITS *also* require ODFW to fund and implement genetic sampling of steelhead in the North Santiam and South Santiam Rivers every five years, starting in Fiscal Year 2021, to determine whether and how much the mitigation measures included in the proposed action impact “current gene flow (introgression) from non-native steelhead into natural populations.” NOAA AR 2207. But this requirement to design, fund, and conduct a genetic sampling study to assess current gene flow does not mean that the ITS requires ODFW to use novel scientific methods to measure incidental take, and it does not make the ITS arbitrary and capricious.

For these reasons, Plaintiffs’ challenges to the ITS miss their mark.

## **VI. Plaintiffs’ conclusory NEPA claim fails as a matter of law.**

Plaintiffs’ only challenge to NMFS’s NEPA analysis is that “[t]he EIS is unlawful because it fails to consider a reasonable range of alternatives to meet the purpose and need.” Pls.’ Br. at 39.<sup>18</sup> According to Plaintiffs, the range of alternatives NMFS evaluated was insufficient to

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<sup>18</sup> Plaintiffs’ Second Amended Complaint includes an allegation that “[t]he EIS fails to include information of a ‘high quality,’ and ‘[a]ccurate scientific analysis’” and “fails to take a ‘hard look’ at the consequences and effects on winter steelhead caused by the hatchery summer

satisfy NEPA because it did not include the alternative of approving the spring Chinook hatchery program but not the summer steelhead hatchery program. *Id.* Plaintiffs’ argument is both conclusory and incorrect.

The purpose and need for the proposed action are two-fold: “(1) for NMFS to evaluate the submitted HGMPs to ensure the hatchery programs are not jeopardizing ESA-listed salmon and steelhead, and (2) for the co-managers to operate the hatchery programs for the conservation and recovery of ESA-listed salmon and steelhead, while providing hatchery-origin fish for recreational and commercial fisheries.” NOAA AR 14322. NMFS considered five alternatives to meet that purpose and need: (1) No-Action (*i.e.*, continuation of the existing hatchery programs)<sup>19</sup>; (2) Proposed Action/Preferred Alternative (*i.e.*, approval of the updated HGMPs); (3) Reduce Hatchery Production to Reintroduction Needs (*i.e.*, no fishery mitigation); (4) Terminate the Existing Hatchery Programs in the Upper Willamette River Basin; and (5) Increase Hatchery Production To Support Fisheries Consistent with ESA Impact Limits. *See, e.g.*, NOAA AR 14323–24, 14367–73. Among other environmental impacts, NMFS evaluated the effects of each of these five alternatives on winter steelhead. NOAA AR 14442–84.

Under the applicable “rule of reason” standard, an EIS “need not consider an infinite range of alternatives, only reasonable or feasible ones.” *Westlands*, 376 F.3d at 868 (quoting *City of Carmel-by-the-Sea v. Dep’t of Transp.*, 123 F.3d 1142, 1155 (9th Cir. 1995)). “Nor is an agency required to undertake a ‘separate analysis of alternatives which are not significantly distinguishable from alternatives actually considered, or which have substantially similar consequences.’” *Id.* (quoting *Headwaters, Inc. v. Bureau of Land Mgmt.*, 914 F.2d 1174, 1181 (9th Cir. 1990)). NEPA thus does not require an agency to consider “every conceivable permutation” of a range of alternatives. *Id.* at 871. The “touchstone” is “whether [the] selection

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steelhead program.” ECF 46 ¶ 50. Plaintiffs’ motion for summary judgment fails to raise this argument. That argument has therefore been waived. *See Graves*, 623 F.3d at 1048.

<sup>19</sup> Plaintiffs refer to alternative 4 as the “no action” alternative. Pls.’ Br. at 39. Regardless, as explained, NMFS considered the impacts of terminating the summer steelhead hatchery program in alternative 4.

and discussion of alternatives fosters informed decision-making and informed public participation.” *Id.* at 872 (quoting *California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982)).

As related to the introduction of hatchery summer steelhead, the five alternatives considered encompassed a broad range of potential actions: maintaining the existing levels (alternative 1); maintaining the existing levels and implementing additional best practices for hatchery operations (alternative 2), replacing introduction of summer steelhead with introduction of hatchery-origin winter steelhead (alternative 3), terminating introduction (alternative 4), and increasing introduction (alternative 5). NOAA AR 14365–72. Thus, NMFS’s decision whether to approve the summer steelhead HGMP was informed by consideration of the impacts on winter steelhead of introducing varying levels of summer steelhead, including terminating the summer steelhead hatchery program. Plaintiffs fail to proffer any argument, let alone establish, how its proposed alternative would have yielded any additional information about the impact of summer steelhead on winter steelhead, or how the range of alternatives NMFS evaluated failed to “foster[] informed decision-making and informed public participation” concerning those impacts. *Westlands*, 376 F.3d at 872 (internal quotation marks and citation omitted).

Plaintiffs’ “false dichotomy” argument rests on the false premise that NMFS’s analysis of and decision to approve the summer steelhead HGMP was somehow tethered to the approval of the spring Chinook HGMPs. Each HGMP is species-specific. Although NMFS analyzed the HGMPs together in each alternative, the two programs, and their environmental impacts, are separate and independent. For each alternative, NMFS varied the levels of introduction of hatchery fish under each separate program (as well as varying the introduction of natural origin broodstock) and evaluated the environmental effects of each program on its respective species. Plaintiffs do not even suggest there is any cross-effect between the programs such that approval or disapproval of the spring Chinook HGMPs has any bearing on the effects of summer steelhead on winter steelhead, nor do they suggest that unbundling the analyses would yield any new

information to inform its decision.<sup>20</sup> The fact that NMFS could have made the administrative decision to approve one program but not the other does not correlate to different environmental effects of one on the other.

In short, NMFS's NEPA analysis was not arbitrary and capricious. Mere disagreement with NMFS's conclusion cannot establish a NEPA violation. *See Robertson*, 490 U.S. at 350 (explaining that "NEPA itself does not mandate particular results, but simply prescribes the necessary process").

**VII. No remedy is warranted, but even if one were, Plaintiffs' requested one is not.**

The Court should grant Federal Defendants' motion for summary judgment. But if the Court finds any error with the BiOp or EIS, Federal Defendants request an opportunity to further brief the appropriate remedy. Plaintiffs request that the BiOp and EIS be vacated and remanded. Pls.' Br. at 39. But courts need not vacate agency actions as a matter of course. *See Cal. Cmty. Against Toxics v. EPA*, 688 F.3d 989, 992 (9th Cir. 2012) ("Whether agency action should be vacated depends on how serious the agency's errors are 'and the disruptive consequences of an interim change that may itself be changed.'" (citation omitted)). This test cannot be applied until the Court issues a decision, but the Court may find a limited error that could be rectified with further explanation from NMFS.

**CONCLUSION**

For all these reasons, the Court should grant Federal Defendants' cross-motion for summary judgment and deny Plaintiffs' motion for summary judgment.

Dated: June 14, 2024

Respectfully submitted,

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<sup>20</sup> Plaintiffs' argument that NMFS should have considered additional permutations because hatchery spring Chinook have a conservation role for spring Chinook and summer steelhead do not benefit winter steelhead is a red herring. The introduction of hatchery-origin spring Chinook (and at what level) has no bearing on the impact of summer steelhead on winter steelhead or whether to continue that aspect of the wider Willamette River hatchery program.

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**CERTIFICATE OF SERVICE**

I hereby certify that I electronically filed and served the foregoing with the Clerk of the Court for the United States District Court for the District of Oregon using the CM/ECF system.

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